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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,140	11/19/2001	Akira Momose	216258US2	8185

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EXAMINER

ROBINSON, MYLES D

ART UNIT PAPER NUMBER

2622

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/988,140

Applicant(s)

MOMOSE ET AL.

Examiner

Myles D. Robinson

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The examiner has considered the references listed in the Information Disclosure Statements (IDS) submitted on 11/19/2001, 1/28/04 and 2/5/2005 (see attached PTO-1449).

Drawings

3. The drawings are objected to because of the misspelling of the word "editing" in Fig. 6, reference step S2.

Furthermore, the drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: references l6, l7, l8, l9 and l10 in Fig. 8, references d11, d12, d13 and d14 in Fig. 9, reference b14 in Fig. 10, reference a32 in Fig. 11, reference a10 in Fig. 14, references d11, d12, d13, d14 and l16 in Fig. 18 and 19, and references l1, l2, l3, l4 and l5 in Fig. 21.

Furthermore, the drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "a21" has been used to designate both staple display area and punch icon display area.

Furthermore, the drawings are objected to under 37 CFR 1.83(a) because they fail to show the "sidewise" radio button selected in document orientation selection area a2 in Fig. 8 as described in the specification (pg. 15, lines 5 – 8). Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference signs mentioned in the description: references print system 1 (see specification, pg. 6, line 16 –17), print function setting screen of printer driver No. 1 (pg. 13, line 4), printing function setting screen of the printer driver No. 2 (pg. 13, line 10), radio button d1 (pg. 16, line 21), radio button d4 (pg. 16, line 25), variable power designation area a21 (pg. 18, line 4), magnification selection area a22 (pg. 18, line 7), punch icon display area a4 (pg. 19, line 9), icon I25

Art Unit: 2622

(pg. 23, line 13), radio button d2 (pg. 25, line 13), icon I21 (pg. 25, line 17), name input area a41 (pg. 26, line 25), comment input area (pg. 27, line 2). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the disclosure will not be held in abeyance.

Appropriate correction is required.

Claim Objections

5. The following quotation of 37 CFR 1.75(a) is the basis of the objection:

- (a) The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery.

Claim 2 – 5 and 9 – 12 are objected to under 37 CFR 1.75(a) as failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention or discovery.

Claim 2 recites the limitation "a plurality of printing functions" in line 4 of the claim after the limitation "a plurality of printing functions" was claimed in line 6 of the independent claim. The applicant has failed to particularly point out and distinctly claim if the applicant is referring to the same, instant "plurality of printing functions" or a

Art Unit: 2622

unique and distinctly different “plurality of printing functions” within the claim. All claims dependent upon this claim suffer the same deficiency and, therefore, are objected to as well.

Claim 5 recites the limitation “to prepare a symbol” in line 7 of the claim after the limitation “a symbol” prepared by a symbol preparation unit was claimed in line 9 of the independent claim. The applicant has failed to particularly point out and distinctly claim if the applicant is referring to the same, instant “prepared symbol” or a unique and distinctly different “prepared symbol” within the claim.

Claim 9 recites the limitation “a plurality of printing functions” in line 5 of the claim after the limitation “a plurality of printing functions” was claimed in line 9 of the independent claim. The applicant has failed to particularly point out and distinctly claim if the applicant is referring to the same, instant “plurality of printing functions” or a unique and distinctly different “plurality of printing functions” within the claim. All claims dependent upon this claim suffer the same deficiency and, therefore, are objected to as well.

Claim 12 recites the limitation “preparing a symbol” in line 8 of the claim after the limitation “preparing a symbol” representing the selected printing function was claimed in line 8 of the independent claim. The applicant has failed to particularly point out and distinctly claim if the applicant is referring to the same, instant “preparing a symbol” or a unique and distinctly different “preparing a symbol” within the claim.

Furthermore, the claim recites the limitation “a plurality of image data” in line 7 of the claim after the limitation “a plurality of image data” was claimed in line 4 of the

Art Unit: 2622

instant claim. The applicant has failed to particularly point out and distinctly claim if the applicant is referring to the same, instant "plurality of image data" or a unique and distinctly different "plurality of image data" within the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. ***Claims 4, 5 and 11*** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to **claims 4 and 11**, it is unclear whether many symbols, claimed as a symbol group, are utilized to represent a single printing function or if each individual symbol represents a single printing function as claimed in the function of the printing function selection unit and the printing function selection step.

Referring to **claim 5**, it is unclear whether the prepared symbol represents a plurality of printing functions or if the prepared symbol represents a single printing function as claimed in the function of the symbol preparation unit.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Art Unit: 2622

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. **Claim 15** is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 15 is drawn to functional descriptive material NOT claimed as residing on a computer readable medium. MPEP

2106.IV.B.1(a) (Functional Descriptive Material) states:

"Data structures not claimed as embodied in a computer-readable medium are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer."

"Such claimed data structures do not define any structural or functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structures' functionality to be realized."

Claim 15, while defining a computer program for executing on a computer, does not define a "computer-readable medium" and is thus non-statutory for that reason. A computer program can range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to embody the program on "computer-readable medium" in order to make the claim statutory.

"In contrast, a claimed computer-readable medium encoded with the data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory." – MPEP 2106.IV.B.1(a)

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2622

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. **Claims 1 – 6, 8 – 13, and 15** are rejected under 35 U.S.C. 102(b) as being anticipated by **Evanitsky et al.** (U.S. Patent No. 5,045,880).

Referring to **claim 1**, Evanitsky et al. disclose an information processing device comprising a display unit (see Fig. 6, monitor 214) for displaying at least one display screen (see Fig. 6, video display screen 220), wherein said display screen includes a symbol display area (see Fig. 7, work selection area 240, column 8, lines 11 – 19, 36 – 41, and column 9, lines 31 – 35), a symbol display control unit (see Fig. 3, user interface 213) which displays a list of symbols, each representing a plurality of printing functions (see Fig. 23, folders 904, 906, 908, ... 920), in said symbol display area on said display screen (column 5, lines 29 – 34, column 7, lines 9 – 18, column 8, lines 6 – 19, column 15, lines 6 – 53), a symbol selection unit (see Fig. 8, touch input system 226) which selects one symbol from the list of symbols display in said symbol display area (column 8, lines 14 – 19, column 9, lines 44 – 49, and column 10, lines 5 – 18, 30 – 41), and a printing function setting unit which sets a plurality of printing functions represented by the symbol selected by said symbol selection unit (see Fig. 23, slots or folders 902 – 920 and column 16, lines 12 – 54).

Referring to **claim 2**, Evanitsky et al. disclose the device further comprising a printing function display control unit (see Fig. 3, user interface 213) which displays a plurality of printing functions in a printing function display area (see Fig. 10, icons 302, 304, 306, ... 320 displayed in scorecard 270) on said display screen (column 7, lines 9

Art Unit: 2622

– 18, column 8, lines 36 – 41, and column 8, lines 52 – 56 and column 11, lines 22 – 32), a printing function selection unit (see Fig. 8, touch input system 226) which selects at least one printing function displayed in said printing function display area (column 7, lines 9 – 18, column 8, lines 14 – 19, column 9, lines 44 – 49, column 10, lines 30 – 41 and column 11, lines 22 – 32), a symbol preparation unit (see Fig. 3, controller 114 in relation to user interface 213) which prepares a symbol representing the printing function selected by said printing function selection unit (column 7, lines 3 – 5), and a symbol registration unit (see Fig. 8, touch input system 226) which registers the printing function selected by said printing function selection unit in correlation with the symbol prepared by said symbol preparation unit (see Fig. 23, slots or folders 902 – 920, column 15, lines 6 – 53 and column 16, lines 12 – 54).

Referring to **claim 3**, Evanitsky et al. disclose the device further comprising a symbol display unit (see Fig. 7, work selection area 240, column 8, lines 11 – 19, 36 – 41, and column 9, lines 31 – 35) which displays the symbol prepared by said symbol preparation unit in a prepared symbol display area on the display screen (see Fig. 23, slots or folders 902 – 920, column 15, lines 6 – 53 and column 16, lines 12 – 54).

Referring to **claim 4**, Evanitsky et al. disclose the device further wherein said printing function display control unit displays a symbol group (see Fig. 13, icons 308, 310, 318, 320) representing a single printing function in said printing function display area (column 7, lines 9 – 18 and column 9, lines 31 – 34), and said printing function selection unit selects a plurality of symbols from the symbol group displayed in said printing function display area, to select the printing functions respectively represented

Art Unit: 2622

by said selected plurality of symbols (column 8, lines 6 – 11, 14 – 19, column 10, lines 30 – 41 and column 11, lines 22 – 32). Each of the icons, or symbols, in Fig. 13 is considered to represent a single printing function.

Referring to **claim 5**, Evanitsky et al. disclose the device further comprising a memory unit (see Fig. 3, memory 115) which stores image data representing each printing function (column 7, lines 9 – 18 and column 8, lines 6 – 19), wherein said symbol preparation unit (see Fig. 3, controller 114 in relation to memory 115) combines the image data stored in said memory unit, representing the printing function selected by said printing function selection unit, to prepare a symbol (see Fig. 23, folders 904, 906, 908, ... 920) representing a plurality of printing functions (column 15, lines 6 – 53). User interface 213 programs jobs that perform multiple printing functions represented by folders 904, 906, 908, ... 920, which are displayed as icons, pictograms, or otherwise image data. Memory 115 retains the job programming instructions, operating/control information, etc. such as the image data that represent the job programming instructions embodied by folders 904, 906, 908, ... 920 in Fig. 23, which perform jobs with multiple printing functions.

Referring to **claim 6**, Evanitsky et al. disclose the device wherein the printing functions include a paper direction (see Fig. 20, OUTPUT icon 318, "landscaping staple" icon 556 and column 13, lines 30 – 43), a reversing function (see Fig. 15, SIDES IMAGED icon 310 and column 12, lines 45 – 51), an aggregation function (see Fig. 20, OUTPUT icon 318, COLLATED icon 540 and column 13, lines 30 – 43), a binding function (see Fig. 20, OUTPUT icon 318, "bind" icon 558 and column 13, lines 30 – 43),

Art Unit: 2622

a stapling function (see Fig. 20, OUTPUT icon 318, "1 staple" icon 552, "2 staples" icon 554, and column 13, lines 30 – 43), a punching function (see Fig. 13, MAIN PAPER icon 302, "drilled" icon 424 and column 11, line 67 – column 12, line 16), and a scaling function (see Fig. 14, REDUCE/ENLARGE icon 308 and column 12, lines 32 – 44).

Referring to **claims 8 – 13**, respectively, the rationale provided in the rejection of claims 1 – 6, respectively, are incorporated herein. In addition, the apparatus of claims 1 – 6 perform the method of claims 8 – 13.

Referring to **claim 15**, the rationale provided in rejection of claim 8 is incorporated herein. The program of instructions stored within memory (see Fig. 3, memory 115) and executed by a processor (see Fig. 3, controller 114) with within claim 15, respectively, executes the program of instructions (column 18, lines 9 – 11) of claim 8, respectively.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. **Claims 7 and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Evanitsky et al.** (U.S. Patent No. 5,045,880) in view of **Fitzpatrick et al.** (U.S. Patent No. 5,608,860).

Referring to **claim 7**, Evanitsky et al. disclose the device as discussed above but does not explicitly disclose the device further comprising a rearrangement instruction

unit which instructs rearrangement of symbols displayed in said symbol display area, and a rearrangement unit which arranges the symbols displayed in said symbol display area, in accordance with the rearrangement instructed by said rearrangement instruction unit.

Fitzpatrick et al. disclose the device further comprising a rearrangement instruction unit (see Fig. 1 and Fig. 2, mouse controller 54 of computers 12 and 30) which instructs rearrangement of symbols displayed in said symbol display area (column 3, lines 5 – 21), and a rearrangement unit (see Fig. 1, data processing system 8) which arranges the symbols displayed in said symbol display area (see Fig. 3B, icons 66 and 68 and group icon 69) in accordance with the rearrangement instructed by said rearrangement instruction unit (column 2, lines 37 – 9 and column 3, lines 52 – 57).

Evanitsky and Fitzpatrick are combinable because they are both from the same field of endeavor, being computing and information processing systems utilizing display outputs and graphical user interfaces. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include a graphical user interface able to manipulate, “drag and drop”, or otherwise rearrange symbols and icon on display with the graphical user interface attached to a printing machine. The suggestion/motivation for doing so would have been to improve the ease of using computing devices through direct manipulation operations such as dragging and dropping, as suggested by Fitzpatrick et al. (column 1, lines 16 – 27).

Referring to **claim 14**, the rationale provided in the rejection of claim 7 is incorporated herein. In addition, the apparatus of claim 7 perform the method of claim 7.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Streefkerk et al. (U.S. Patent No. 6,104,470) disclose a printing system and control unit utilizing a visual representation of a sheet or document for selecting document-finishing operations.

Iwamoto et al. (U.S. Patent No. 5,717,501) disclose a digital image forming apparatus using various image editing functions.

Burrell (U.S. Patent No. 6,906,721 B1) discloses systems, methods, and computer program products for managing the display of information output by a computer program, notably a display management module of a display terminal.

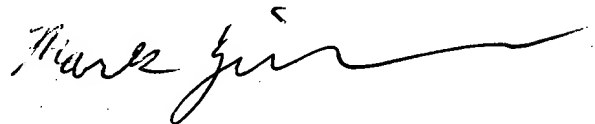
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myles D. Robinson whose telephone number is (571) 272-5944. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MDR

A handwritten signature in black ink, appearing to read "Mark Zimmerman", with a long horizontal flourish extending to the right.

MARK ZIMMERMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600